

IN THE DRAWINGS

One sheet of drawing is attached hereto.

The sheet includes FIG. 1, and replaces the original sheet including FIG. 1.

In FIG. 1, the legend "Prior Art" has been added.

Attachment: Replacement Sheet

REMARKS

Consideration of Information Disclosure Statement Submitted by Applicant

On January 3, 2005, Applicant submitted an Information Disclosure Statement (hereafter "IDS"). The IDS included sheet 1 and sheet 2. In the Office Action, the Examiner did not indicate consideration of sheet 2, which cites a PCT International Search Report and Written Opinion for PCT International Application No. US2004/020203, mailed 13 October 2004 (10 pages). The Examiner is respectfully requested to consider the citation on sheet 2 and indicate the consideration in the next office action.

Amendment to the Claims and New Claims

No new matter is added.

Claim amendments were made to more clearly set out the intended subject matter or to correct typographical errors. Support for the amendments to the claims can be found for example in FIGs. 3 and 4 and accompanying text.

Support for new Claims 22-24 can be found for example in FIGs. 3 and 4 and accompanying text.

Amendment to the Abstract

The Examiner indicated that the abstract is insufficient. Applicant has amended the abstract to provide additional information. Applicant notes that the claims define the scope of embodiments of the invention. No new matter is added. Support for the amendments to the claims can be found for example in FIGs. 3 and 4 and accompanying text.

Amendment to FIG. 1

The Examiner indicated FIG. 1 should be labeled with the legend "Prior Art". FIG. 1 has been amended to include the legend "Prior Art".

Claim Rejections Under 35 U.S.C. §102(e)

The Examiner rejected Claims 1-17 and 20-21 under 35 U.S.C. §102(e) as being anticipated by Richmond (U.S. Patent Publication No. 2002/0041650 A1) (hereafter “Richmond”).

Amended independent Claim 1 recites in part:

“selectively reading out at least one duplicate of previously read out data in response to an underflow state, wherein the at least one duplicate of previously read out data excludes dummy data and is independent of content of data” (emphasis added).

Amended independent Claim 9 recites in part:

“selectively read out a duplicate of previously read out data in response to an underflow state, wherein the at least one duplicate of previously read out data excludes dummy data and is independent of content of data” (emphasis added).

Amended independent Claim 17 recites:

“selectively read out a duplicate of previously read out data in response to an underflow state, wherein the at least one duplicate of previously read out data excludes dummy data and is independent of content of data” (emphasis added).

Paragraph [0021] of Richmond recites “elastic buffer is between the PHY and receive link layers and serves to detect overflow or underflow, and resynchronize the receive data to the transmit clock by inserting or deleting align primitives or other non essential characters as necessary to prevent overflow or underflow. Hereafter, the non essential primitives or other non essential characters will simply be referred to as primitives.” (Emphasis added).

Paragraph [0031] of Richmond recites “If the transmit clock is faster than the receive clock ... When this condition occurs, the next repetitive primitive detected in the data register is duplicated in the output stream by not incrementing the transmit side

counter 54 when the register holding the primitive is coupled to the output stream so that the primitive is transmitted twice during consecutive clock cycles." (Emphasis added).

Paragraph [0011] of Richmond defines "primitives" as follows: "The primitives, or other non essential data, that are inserted and deleted can be any character or other non essential data that is inconsequential to the serial protocol in use for the link between the receiver and the shared circuitry such as, but not limited to, any defined non op primitive or any other character that will not cause any unintended actions in the shared circuitry of transmitter or receiver and will not cause the system to operate improperly." In the case of serial ATA protocol, the primitive used is the align primitive." (Emphasis added).

Accordingly, Richmond clearly does not teach "selectively reading out at least one duplicate of previously read out data in response to an underflow state, wherein the at least one duplicate of previously read out data excludes dummy data and is independent of content of data" (emphasis added) of amended Claim 1. Rather, Richmond teaches "primitive is transmitted twice during consecutive clock cycles" where a primitive is "any character or other non essential data that is inconsequential to the serial protocol in use for the link between the receiver" (emphasis added). Accordingly, amended Claim 1 is allowable over the teachings of Richmond. Claims 2-8 and new Claim 22 depend from Claim 1 and thus are allowable over the teachings of Richmond for at least the same reasons as pertain to amended Claim 1.

Amended Claims 9 and 17 recite in part: "selectively read out a duplicate of previously read out data in response to an underflow state, wherein the at least one duplicate of previously read out data excludes dummy data and is independent of content of data" (emphasis added). For similar reasons as stated earlier with regard to amended Claim 1, amended Claims 9 and 17 are allowable over the teachings of Richmond.

Claims 10-16 and new Claim 23 depend from Claim 9 and thus are allowable over the teachings of Richmond for at least the same reasons as pertain to amended Claim 9.

Claims 20 and 21 and new Claim 24 depend from Claim 17 and thus are allowable over the teachings of Richmond for at least the same reasons as pertain to amended Claim 17.

Claim Rejections Under 35 U.S.C. §103(a)

The Examiner rejected Claims 18 and 19 under 35 U.S.C. §103(a) as being unpatentable over Richmond.

As stated earlier, Richmond teaches “primitive is transmitted twice during consecutive clock cycles” where a primitive is “any character or other non essential data that is inconsequential to the serial protocol in use for the link between the receiver” (emphasis added). Accordingly, Richmond discourages and teaches away from “read out a duplicate of previously read out data in response to an underflow state, wherein the at least one duplicate of previously read out data excludes dummy data and is independent of content of data” (emphasis added) of amended Claim 17. Claims 18 and 19 are allowable over the teachings and suggestions of Richmond for at least the reasons as pertain to base Claim 17.

Final Remarks

Applicant requests allowance of all pending Claims (namely, Claims 1-24).

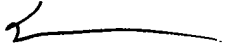
If the Examiner has any questions concerning this application, please call the applicant’s attorney at (212) 661-5488.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFAM LLP

Dated: 12 Aug. 2005



Michael J. Mallie
Reg. No. 36,591

12400 Wilshire Blvd.
Seventh Floor
Los Angeles, CA 90025-1030
(408) 720-8300